

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILI	NG DATE.	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,556	02/08/2002		William P. Moyne	V0006/7001	9892
22832	7590	10/06/2004		EXAM	INER
KIRKPATR	ICK & LC	PATEL,	PATEL, NITIN		
75 STATE ST	REET		•		
BOSTON, M	A 02109-	1808	ART UNIT	PAPER NUMBER	
				2673	

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
,	10/071,556	MOYNE ET AL.					
Office Action Summary	Examiner	Art Unit					
	Nitin Patel	2673					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)⊠ Responsive to communication(s) filed on 08 Fe	ebruary 2002.						
<u> </u>	action is non-final.						
3) Since this application is in condition for allowar	nce except for formal matters, pro	secution as to the merits is					
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4) Claim(s) 1-82 is/are pending in the application.							
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-82</u> is/are rejected.	· · · · · · · · · · · · · · · · · · ·						
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or	☐ Claim(s) are subject to restriction and/or election requirement.						
Application Papers							
9) The specification is objected to by the Examiner.							
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119		•					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents	s have been received.						
<ul><li>2. Certified copies of the priority documents</li><li>3. Copies of the certified copies of the prior application from the International Bureau</li></ul>	ity documents have been receive						
* See the attached detailed Office action for a list	, , , ,	d.					
Attachment(s)	_						
1) Notice of References Cited (PTO-892)	4) Interview Summary						
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> </ul>	Paper No(s)/Mail Da 5) Notice of Informal P	atent Application (PTO-152)					
Paper No(s)/Mail Date <u>4.5</u> . 6) Other:							

Art Unit: 2673

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-13,16-22,25-45,48-82 is rejected under 35 U.S.C. 102(e) as being anticipated by Petrie et al. (US 2002/0055788 A1).

As per claim 1, Petrie shows system for recording a writing performed on a surface comprising: a stylus (element 24 In fig.1 and In section 0073) comprising a first signal transmitter for transmitting position signals corresponding to positional data representative of the writing when the stylus is disposed adjacent to the surface (In section 0073); and a detector assembly comprising a plurality of position signal receivers for receiving the position signals transmitted by the stylus and further comprising a storage medium for recording the positional data(In section 0073 and secdtion0074).

As per claim 2, Petrie shows the stylus further comprises a second signal transmitter for transmitting timing signals and wherein the detector assembly further comprises timing signal receiver for receiving the timing signals

Art Unit: 2673

transmitted by the stylus (In section 0073 shows stylus has more than one transmitter and receivers).

As per claims 3,4 Petrie shows wherein the timing signals are infrared light signals (in section 0080).

As per claim 5, Petrie shows the position signals are ultrasound signals 9in section 0074).

As per claim 6, Petrie shows the detector assembly further comprises logic for converting the position signals to the positional data (element 12 in section 0074).

As per claim 7, Petrie shows a processing unit for displaying the positional data representative of the writing (In section 0075).

As per claim 8, Petrie shows in the processing unit is a desktop computer, a laptop computer, a wireless device, a hand-held device, a printer, or any combination thereof (in Fig.1 element 52).

As per claim 9, Petrie shows comprising a display device and a user interface (in section 0078 it could be whiteboard or any writing device could have display such as Icd and 0072).

As per claim 10, Petrie shows an eraser comprising a third signal transmitter for transmitting position signals corresponding to positional information representative of removal of the writing when the eraser is disposed adjacent to the surface (In section 0072).

As per claims 11-13 Petrie shows plurality of position signal receivers are

Art Unit: 2673

condenser microphones (In section 0079).

As per claim 16, Petrie shows detector assembly comprises a base appliance for receiving the position signals from the first signal transmitter and for recording the positional data (In section 0075), and a personality module removably attachable to the base appliance for providing a user interface for the detector assembly (In section 0079 and In section 0073 states that the appliance could have include in a stylus).

As per claim 17,Petrie shows the stylus further comprises a second signal transmitter for transmitting timing signals and wherein the base appliance further comprises timing signal receiver for receiving the timing signals from the stylus (In section 0073 and 0074).

As per claim 18, Petrie shows wherein the timing signal receiver is an infrared detector (In section 0080).

As per claim 19, Petrie shows the base appliance further comprises logic for converting the position signals to positional data (In section 0075).

As per claims 20-22, Petrie shows the plurality of position signal receivers are condenser microphones (In section 0079).

- 23. The system of claim 20 wherein the condenser microphones have a frequency range of about 1 Hz to about 100 kHz.
- 24. The system of claim 23 wherein the condenser microphones have a frequency range of about 50 Hz to about 20 kHz.

As per claim 25, Petrie shows the personality module is in communication with

Art Unit: 2673

a computer, a wireless device, a network, a printer, or a removable storage medium (In Fig.1 element 12 connected with network to communicate with different devices).

As per claim 26,Petrie shows the user interface of the personality module is buttons, LEDs, LCDs, buzzers, or any combination thereof (in section 0072).

As per claim 27, Petrie shows wherein the personality module further comprises logic (in section 0082).

As per claim 28, Petrie shows the detector assembly is powered by a power supply wherein the power supply is a battery or an external power supply (In section 0080).

As per claim 29, Petrie shows the detector assembly further comprises an attachment mechanism for permanently attaching the detector assembly to the writing surface (In fig.1 element 24).

As per claims 30,31,32,33 Petrie shows the detector assembly further comprises a security mechanism for securing the detector assembly to the writing surface (In section 0073).

As per claim 34, Petrie shows the detector assembly has a plurality of power states (In section 0080).

As per claim 34, Petrie shows in the writing includes erasing (in section 0072).

As per claim 36,Petrie shows surface is a whiteboard, a blackboard, a clipboard, a desktop, a wall, a projection screen, a flip chart tablet, a glass pane, or an active display (in section 0078).

Art Unit: 2673

As per claim 37,Petrie shows a system for recording a writing performed on a surface comprising: a stylus comprising a first signal transmitter for transmitting position signals corresponding to positional data representative of the writing when the stylus is disposed adjacent to the surface (In section 0073); and a detector assembly comprising a plurality of condenser microphones for receiving the position signals transmitted by the stylus (In section 0073 and 0074).

As per claim 38, detector assembly further comprises logic for converting the position signals to the positional data, and a storage medium for recording the positional data (in section 0066).

As per claim 39, Petrie shows wherein the stylus further comprises a second signal transmitter for transmitting timing signals and wherein the detector assembly further comprises an infrared detector for receiving the timing signals transmitted by the stylus (in section 0073).

As per claim 40, Petrie a detector for use in a transcription system, the transcription system including a stylus (element 24 In Fig.1) for transmitting signals when the stylus is disposed adjacent to a surface (in Fig.1), the detector comprising: a base appliance comprising a plurality of signal receivers for receiving the position signals transmitted by the stylus (element 12 receiving signals in section 0074), logic for converting the position signals to positional data, and an internal local storage medium for recording the positional data; and a personality module removably attachable to the base appliance for providing a user interface for the detector(In section 0075 and 0073).

Art Unit: 2673

As per claim 41, Petrie shows the base appliance further comprises a timing signal receiver for receiving timing signals transmitted by the stylus (In section 0075).

As per claim 42, Petrie shows the timing signal receiver is an infrared detector (In section 0080).

As per claim 43-45 the plurality of signal receivers are condenser microphones (In section 0079).

- 46. The detector of claim 43 wherein the condenser microphones have a frequency range of about 1 Hz to about 100 kHz.
- 47. The detector of claim 46 wherein the condenser microphones have a frequency range of about 50 Hz to about 20 kHz.

As per claim 48, Petrie shows the personality module is in communication with a computer, a wireless device, a network, a printer, or a removable storage medium (In Fig.1).

As per claim 49, Petrie shows the personality module further comprises logic (In section 0075).

As per claim 50, Petrie shows the detector is powered by a power supply wherein the power supply is a battery or an external power supply (in section 0080).

As per claims 51-54, Petrie shows The detector of claim 40 further comprising an attachment mechanism for permanently attaching the detector to the writing surface 9in Fig.1 and In section 0073).

Art Unit: 2673

As per claim 55, Petire shows the timing signals are infrared light signals (In section 0081).

As per claim 56, Petrie shows the position signals are ultrasound signals (in section 0074).

As per claim 57, Petrie shows a detector for use in a transcription system, the transcription system including a stylus (In Fig.1 element 24) for transmitting signals when the stylus is disposed adjacent to a surface, the detector comprising: a base appliance comprising a plurality of condenser microphones for receiving position signals transmitted by the stylus (in section 0073), the position signals corresponding to positional data representative of writing performed on the surface (in section 0074); and a personality module removably attachable to the base appliance for providing a user interface for the detector(in section 0073 states that system 12 may also includes in stylus so it is detachable from stylus as shown in fig.1).

As per claim 58, Petrie shows the base appliance further comprises logic for converting the position signals to the positional data, and an internal local storage medium for recording the positional data (in section 0075).

As per claim 59, Petrie shows a method for recording a writing performed on a surface comprising (In Fig.1): providing a detector comprising a plurality of condenser microphones capable of receiving an acoustic signal (in section 0073 and 0074); sending the acoustic signal from a stylus at a position on the surface when the stylus is disposed adjacent to the surface (in Fig.1); receiving the

Art Unit: 2673

acoustic signal with the plurality of condenser microphones; converting the acoustic signal to positional data; recording the positional data; and repeating the sending step, receiving step, converting step, and recording step to produce an image corresponding to the writing(in section 0075 and 0076).

As per claims 60-63, Petrie shows wherein the condenser microphones are omnidirectional condenser microphones, pre polarized and ultrasound signal (In section 0073)

As per claim 63, Petrie shows sending a timing signal from the stylus when the stylus is disposed adjacent to the surface; and receiving the timing signal by a timing signal receiver located on the detector (in section 0081).

As per claim 64, Petrie shows the timing signal is an infrared light signal and the timing signal receiver is an infrared detector (in section 0080).

As per claim 65, Petrie shows the detector records the positional data (in section 0075).

As per claims 66,67 downloading the positional data from the detector to a processing unit; and displaying the positional data by the processing unit (in section 0075).

As per claims 68,69,70,71 Petrie shows the processing unit is a desktop computer, a laptop computer, a wireless device, a hand-held device, a printer, or any combination thereof (in Fig.1 and section 0071).

As per claim 72, Petrie shows recording a writing performed on a surface comprising: sending a position signal from a stylus when the stylus is disposed

Art Unit: 2673

adjacent to the surface (in Fig.1); receiving the position signal with a detector comprising a plurality of signal receivers; converting the position signal to positional data using logic located on the detector (In section 0075); recording the positional data on a storage medium located on the detector (in section 0066); and repeating the sending step, receiving step, converting step, and recording step to produce an image corresponding to the writing (in section 0073 and 0074).

As per claims 73 –75 Petrie shows the plurality of signal receivers comprise condenser microphones (In section 0079).

As per claim 76, Petrie shows the position signal is an ultrasound signal (in section 0073).

As per claim 76, sending a timing signal from the stylus when the stylus is disposed adjacent to the surface; and receiving the timing signal with the plurality of signal receivers (in section 0075).

As per claim 77, Petrie shows the timing signals are infrared light signals and the plurality of signal receivers comprising infrared detectors (in section 0080).

As per claim 78, Petrie shows downloading the positional data from the detector to a processing unit (in section 0075).

As per claim 80, Petrie shows the processing unit is a desktop computer, a laptop computer, a wireless device, a hand-held device, a printer, or any combination thereof (in section 0072).

As per claim 81, Petrie shows comprising displaying the positional data by the

Art Unit: 2673

processing unit (in section 0075).

As per claim 82, Petrie shows repeating the sending step, the receiving step, the converting step, and the displaying step to produce an image corresponding to the writing (in section 0075).

### Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 14,15,23,24,46,47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petrie (US 2002/0055788 A1).

As per claims 14,15 Petrie shows frequency rates for communication of bits (in section 0081). Petrie does not specifically show the condenser microphones have a frequency range of about 1 Hz to about 100 kHz and about 50 Hz to about 20 kHz. It would have been obvious to one of ordinary skill in the art, at the time of the invention was made to have a specifically range of frequency to communicate with two different device at certain range to communicate better.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nitin Patel whose telephone number is 703-308-7024. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin H Shalwala can be reached on 703-305-4938. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NP

September 30, 2004

VIJAY SHANKAR PRIMARY EXAMINER